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MEDICAL CENTER

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DEPARTMENT OF IMAGING SCIENCES

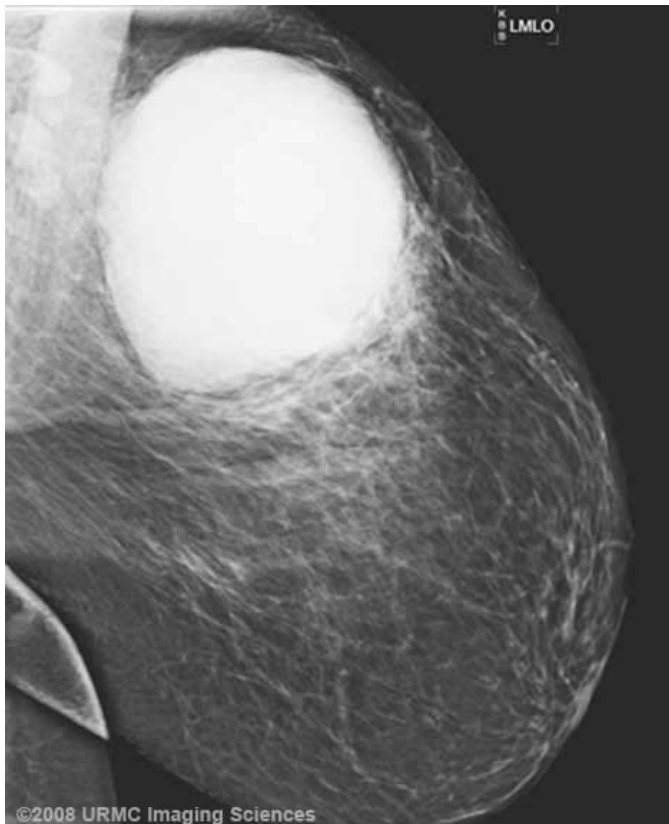
## Imaging Sciences Interesting Cases

### CASE 54

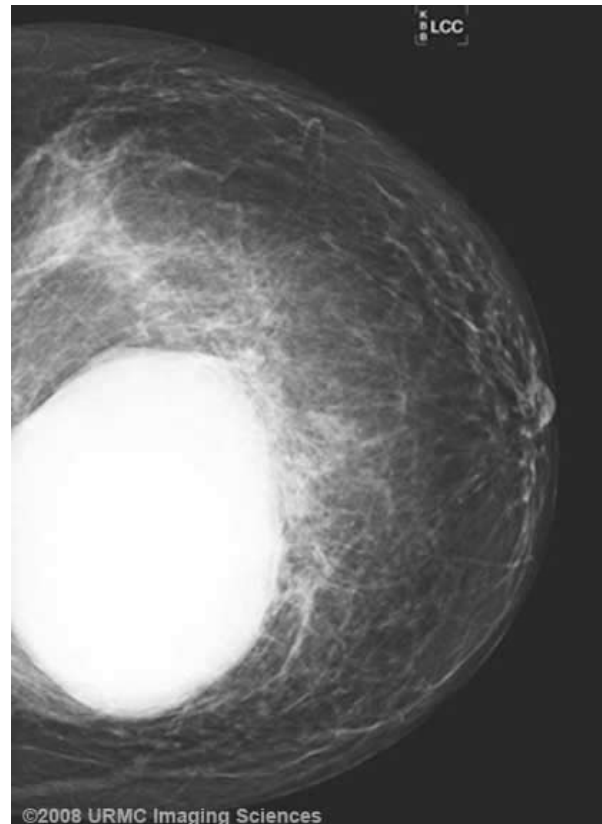
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**CLINICAL PRESENTATION:** A 42-year-old woman had trauma to the left breast 4 weeks prior. Patient palpates a left breast lump near the site of trauma. The patient has not had a recent mammogram or clinical breast examination. She denies routine self-breast examinations.

**IMAGING FINDINGS:** Screening mammogram demonstrates a large, high-density, well-circumscribed mass which measures approximately 10 x 12 cm in the upper outer left breast. The right breast is normal. The breast tissue is composed of scattered fibroglandular elements. Targeted ultrasound of the abnormality demonstrates a heterogeneous mass with vascularity.



**Figure 1:** Left MLO demonstrates a well circumscribed, high density mass in the upper left breast.



**Figure 2:** Left CC demonstrates the mass in the lateral aspect of the left breast.



**Figure 3:** Ultrasound demonstrates a heterogeneous mass with some internal vascularity.

**DIAGNOSIS: Ductal Carcinoma**

**DISCUSSION:** Ductal carcinoma represents 65-80% of all breast cancers most common in patients over 40 years of age. Approximately 90% is sporadic and 10% is genetic. Clinically, there is a palpable thickening or firm lump on breast examination with abnormality on screening mammogram. The classic appearance is a dense mass with spiculated or microlobulated margins. Commonly there can be associated architectural distortion and calcifications, benign or malignant appearing. Ultrasound commonly demonstrates an irregular hypoechoic shadowing mass, taller-than-wide and can present with a dilated duct. Color doppler shows hypervascularity with penetrating vessels. Diagnosis is made with core biopsy. Extent of calcifications is important for surgical planning due to possibility of extensive intraductal component.

**REFERENCES:**

1. Kopans DB. Breast Imaging. 2nd Ed., Lippincott, Williams & Wilkins, 1998:107-34, 576-82.
2. Dogan BE, Ceyhan K, Tukul S, Saylisoy S, Whitman GJ. Ductal dilatation as the manifesting sign of invasive ductal carcinoma. J Ultrasound Med. 2005 Oct;24(10):1413-7. [PubMed]